ABSTRACT OF THE DISCLOSURE

A telecommunications platform (20) has a cluster (32) of processors (30) which collectively perform a platform processing function. Plural processors of the cluster have Internet Protocol (IP) capabilities and respective plural IP interfaces (34). An Internet Protocol (IP) handler (60) distributed throughout the cluster facilitates applications executing on the plural processors comprising the cluster to be addressed using a same media access layer (MAC) address. That is, the Internet Protocol (IP) handler comprises a single IP stack (62) which is addressed with the same media access layer (MAC) address. The Internet Protocol (IP) handler comprises a media access control (MAC) bridge (70). The MAC bridge in turn comprises a first bridge port (72_A) connected by an ethernet link interface (64) to the IP stack; a second MAC bridge port (72_B) provided by a first processor (30_1) of the cluster; a third MAC bridge port (72_C) provided by a second processor (30_n) of the cluster; and, a MAC bridge communications system (74) connecting the virtual bridge port, the virtual bridge port, and the third bridge port to each other. Each of the second bridge port and the third bridge port have a MAC/port table (80) by which the ports can associate the MAC address of the IP stack with the virtual bridge port, thereby permitting the IP stack to be addressable with one and the same media access layer (MAC) address. In one embodiment, the platform can connect to plural local area networks (78_1 and 78_2). In an alternate embodiment, the cluster is connected to a sole local area networks (78).